

# Operations OCC and Training Department

## FMCB Board Briefing

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### ***New Bus Operations Control Center***

**Summary:** The Operations Control Center (OCC) serves as the command center and the control facility which manages all operational decisions regarding normal and abnormal situations associated with bus operations. This facility serves as the primary, but not exclusive point of coordination for all operational incidents affecting bus operations when involving internal departments, external entities or emergency responding agencies.

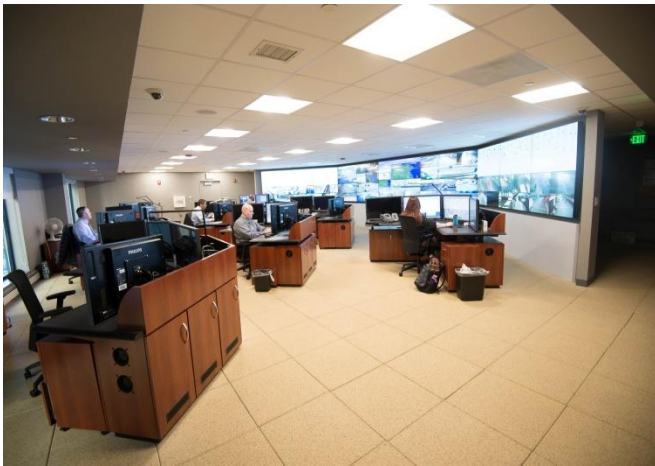


Figure 1: shows the room staffed with 4 dispatchers and 1 supervisor



Figure 2: shows how dispatchers can use both the wall and the console monitors to view video and monitor ladders

### **Background:**

On June 1, 2016 MBTA Operations in conjunction with the OCC project team remodeled and expanded the Bus Operation Control Center located on the 3rd floor of 45 High Street in downtown Boston. The Bus OCC staff was relocated to the backup OCC on the Cabot Campus while demolition and remodeling commenced. The 6 month project was completed on December 30, 2016 and the New Bus Operations Control Center was turned over to MBTA Operations for occupancy. The cost of the completed project for the New Bus Operations Control Center was a \$979,000 capital investment that finished on time and on budget.

### **The Wall:**

The new Bus Operations Control Center displays 22 new high definition flat screen monitors (The Wall), which allow dispatchers and supervisors to monitor bus route ladders, station video and real-time bus mobile video. The viewing and monitoring of route ladders gives dispatchers and supervisors the ability to make timely service adjustments to improve the on time performance (OTP).

### **The Consoles:**

The layout of the new Bus Operations Control Center is now equipped with 6 dispatcher and 2 supervisor consoles. The consoles are equipped with 4 flat screen monitors which display route ladders, video and allow dispatchers to make timely service adjustments to improve service and help meet OTP goals. The additional consoles give the potential to increase the manpower capacity by 50% compared to the configuration of the previous Bus Operations Control Center.

### **Staffing Level Industry Standards:**

The MBTA, with the assistance of the American Public Transportation Association, conducted a peer survey in 2017 to determine an industry standard of bus to dispatcher ratio using transit agencies of similar size. This ratio determines how many buses the on-duty dispatcher is managing real-time. We received responses from; Metro Transit St. Louis, Missouri, Metro Transit Minnesota, MARTA Atlanta, GA, WMATA Washington D.C., and Charlotte Area Transit System in Charlotte NC. In the peak service times these transit agencies have an average ratio of 130:1. Attached are the detailed responses to this survey.

### **MBTA Current Staffing Levels and On-Going Initiatives:**

The MBTA's added four dispatchers and a supervisor in FY18. This brought our bus dispatcher to bus ratio down to 160:1 from 200:1 in the weekday AM and PM service.

An assessment of the work volume of a MBTA bus dispatcher per an eight (8) hour shift is as follows:

- Daily dispatcher vs. buses on street (160)
- Daily radio calls (160 per console during the rush hour)
- Daily phone call (130 per console)
- Daily dispatcher logs (40 per console)

Dispatchers are being trained to put more focus on monitoring and adjusting service using available route ladders. In addition, a formal service adjustment manual is being developed. The goal is to continue to improve the OTP in bus operations.

# American Public Transportation Association Standards Development Program Rail Transit Standards Operating Practices Working Group (OWPG) Survey: Bus Operations Control Centers

Survey initiated by:

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Number of responses received: 5

OPWG Member	How many Bus Controllers does BTS have?	How many bus control Supervisors?	What are their hours and staffing levels?	How many buses do you operate and how many trips?	What is bus to Controller ratio during peak travel?
Martin Gulley Director of Rail Operations Metro Transit (MO) mxgulley@metrostlouis.org	9 Radio Dispatchers communicate with Bus Operators and Transit Service Managers who are out on the routes.	No Supervisor, 1 Manager	Two dispatchers from 5a-1p (AM Peak) and three Dispatchers from 1p-9p (PM Peak) and one (1) overnight dispatcher.	400 buses in the system. We use 319 buses for all peak hours.	AM 160:1 PM 107:1
Brian Funk Deputy COO – Bus Metro Transit (MN) brian.funk@metrotransit.com	17 FTEs for Bus	All are Supervisors . There are 3 assistant managers.	See attachment.	757 AM Peak, 321 midday, 753 PM Peak buses and 195 night. We operate 6,752 scheduled trips for weekday service	AM 151:1 PM 107:1
Henry Woods Director of Bus Transportation MARTA hwoods@itsmarta.com	We have nine (12) Radio Dispatchers who communicate with Bus Operators and Street Supervisors (44). The Supervisors are in cars monitoring	2 managers oversee BCC, a Superintendent and a General Superintendent		~ 560 buses. AM 436 PM 442 8,243 total trips	AM 109:1 Base 113:1 PM 111:1 Night 88:1

OPWG Member	How many Bus Controllers does BTS have?	How many bus control Supervisors?	What are their hours and staffing levels?	How many buses do you operate and how many trips?	What is bus to Controller ratio during peak travel?
	routes, at Points in the System (Stations) or at the facilities (Off the Lot Performance).				
Manny Kennerly Deputy Chief, Investigations WMATA mkennerly@wmata.com	32	5	Staggered shifts but the same three shifts (AM/PM/Owl) there is a skeleton crew on the Owl shift.	AM 1,100 PM 1,300 15,218 total trips	Peak 122:1
Tangee Mobley GM, Bus Operations Charlotte Area Transit System tangee.mobley@ci.charlotte.nc.us	7 bus communications supervisors	1 manager of bus comms.	20:00 – 04:00 (1) 04:00 – 12:00 (2) 05:00 – 13:00 (2) 11:00 – 19:00 (3) 12:30 – 20:30 (3) 13:00 – 21:00 (3)	AM 249 PM 260 2,290 total trips	AM 124:1 PM 86:1